



United States Department of the Interior

FISH AND WILDLIFE SERVICE
East Lansing Field Office (ES)
2651 Coolidge Road, Suite 101
East Lansing, Michigan 48823-6316

IN REPLY REFER TO:

May 24, 2012

Paul Ruesch
U.S. Environmental Protection Agency
77 W. Jackson Blvd.
Chicago, IL 60604-3590

Dear Paul,

Thank you providing the Natural Resource Damage Assessment (NRDA) Trustees the opportunity to provide comments on the "Restoration Plan for Portage Creek Area Time Critical Removal Action" prepared by Environmental Quality Management, Inc. in September of 2011. The comments below are consolidated from those made by representatives from the Michigan Department of Environmental Quality, Michigan Department of Natural Resources, National Oceanic and Atmospheric Administration and the U.S. Fish and Wildlife Service.

Planting List

Overall, this appears to be a very good list for the Portage Creek area. The limited number of species will facilitate care and maintenance as the plantings get established. The species selected are all fairly equal in their "aggressiveness," so they should compete fairly well with each other.

We expect that trees will eventually form a canopy over the creek banks. Most of these plants listed can tolerate some level of shade, and the plan recognizes the need for shade tolerant species for the forested upland portions of the restoration. New England Aster and Marsh Blazing Star are two of the species on the list that have the least tolerance to shade, so these and other species with low tolerance for shade will diminish in number over time in areas that become shady. Plant succession and future shade conditions should be considered when developing detailed planting plans on smaller scales and setting performance standards for monitoring. Plant mixes could be adjusted for any areas that are expected to stay sunny as opposed to those expected to change over time. This may be what is meant in the plan where it states that "plants will not be planted in areas unsuitable for proper growth".

channel. If the fabric is a requirement related to the remediation, then a long-term inspection and maintenance plan should be developed for the rock and fabric system.

Monitoring and Maintenance

Restoration projects along streams take several years and a variety of flow conditions to stabilize. We recommend three to five years of monitoring and maintenance instead of one. Performance standards for plantings are mentioned generally in the plan, but these should be specified in writing in future plans/specifications.

One of the lessons learned at the Plainwell TCRA project was that frequent monitoring for invasive species is important early in the project. No frequency is given for the qualitative monitoring listed in the plan. At the Plainwell TCRA project, a native species, giant ragweed (*Ambrosia trifida*), that was not deliberately planted came to dominate a large area and out competed even the shrubs and tree saplings that had been planted there.

Based on observations of restorations along the Kalamazoo and Tittabawassee Rivers, we recommend installing a watering system initially rather than waiting to see if plants are stressed and then starting the process of funding, designing and implementing a watering system. Also, based on the observations at the Performance Paper site immediately upstream, we recommend that a plan be developed to protect the plantings from grazing by Canada geese.

The possibility of using fertilizer is mentioned. The Kalamazoo River watershed has a TMDL for phosphorus, so care must be taken in the selection of the appropriate type of fertilizer and application rate.

Summary

Overall, the proposed restoration plan for the Portage Creek removal action is a very good starting point for developing more detailed plans and specifications for the restoration. We hope that our specific comments above will assist you in moving forward and we look forward to continuing to work with you on improvements to the Portage Creek corridor. If you have any questions, please feel free to contact me at 517-351-8324 or Judie Alfano of MDEQ (our lead point-of-contact for the Kalamazoo River NRDA) at 517-373-7402.

Sincerely,



Lisa L. Williams